

Please delete the present Abstract of the Disclosure.

Please add the following new Abstract of the Disclosure:

A method for obtaining a gene involved in regulation of cartilage differentiation, preferably Runx2/Cbfa1 which is induced in a cell that is deficient of such transcription factor, such as a Runx2/Cbfa1-deficient chondrocyte. The induced gene is selected using DNA chip analysis, subtraction, or other method with a Runx2/Cbfa1-deficient chondrocyte to carry out such method. The invention also provides a polynucleotide encoding such gene and a polypeptide encoded by the polynucleotide, an antibody against the polypeptide, a recombinant vector comprising the polynucleotide and a transformant comprising the same, a cell expressing the polypeptide, a transgenic animal, an animal model of a bone and/or joint disease (preferably osteoarthritis), a method for screening for a therapeutic agent and/or prophylactic agent for a bone and/or joint disease and a candidate compound selected by the screening method, a pharmaceutical composition for a bone and/or joint disease, and a method for diagnosing such disease.